

WE CLAIM:

1. A method of treating patients in need of treatment for a cardiac disorder, comprising administering to said patient a seven carbon fatty acid compound or derivative thereof, wherein said compound or derivative thereof is able to readily enter the mitochondrion without special transport enzymes.
2. The method of Claim 1, wherein said seven carbon fatty acid compound comprises n-heptanoic acid.
3. The method of Claim 1, wherein said seven carbon fatty acid compound comprises a triglyceride comprising n-heptanoic acid.
4. The method of Claim 1, wherein said triglyceride comprises triheptanoin.
5. The method of Claim 1, wherein said derivative is a five carbon fatty acid chain.
6. The method of Claim 1, wherein said derivative is selected from the group consisting of 4-methylhexanoate, 4-methylhexenoate, 3-hydroxy-4-methylhexanoate, 5-methylhexanoate, 5-methylhexenoate and 3-hydroxy-5-methylhexanoate.
7. The method of Claim 1, wherein said compound or derivative thereof is capable of being broken down by normal β -oxidation in humans to methylbutyric acid.
8. The method of Claim 1, wherein said compound or derivative thereof is capable of being broken down by normal β -oxidation in humans to isovaleric acid.
9. The method of Claim 1, wherein said compound or derivative is capable of being broken down by normal β -oxidation in humans to n-valeryl-CoA.
10. The method of Claim 1, wherein said compound or derivative is capable of being broken down by normal β -oxidation in humans to propionyl-CoA in one or more oxidative procedures.

11. The method of Claim 1, wherein said compound or derivative thereof is provided to said patient in an amount comprising at least about 25% of the dietary caloric requirement for said patient.

12. The method of Claim 1, wherein said compound or derivative is provided orally.

13. The method of Claim 1, wherein said compound or derivative is provided parenterally.

14. The method of Claim 1, wherein said compound or derivative is provided intraperitoneally.

15. The method of any of Claims 1-14, wherein said cardiac disorder is cardiac myopathy.

16. The method of any of Claims 1-14, wherein said cardiac disorder is the aftermath of heart surgery and said compound or derivative is utilized for direct fueling of heart muscle.